

Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) EP 0 856 818 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
08.05.2002 Bulletin 2002/19

(51) Int Cl.7: G07F 7/10

(43) Date of publication A2:
05.08.1998 Bulletin 1998/32

(21) Application number: 97122744.2

(22) Date of filing: 23.12.1997

(84) Designated Contracting States:
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC
NL PT SE
Designated Extension States:
AL LT LV MK RO SI

(72) Inventor: Hill, Michael John
Coppet, Vaud 1296 (CH)

(74) Representative: Gibson, Sarah Jane et al
Motorola
European Intellectual Property Operations
Midpoint
Alencon Link
Basingstoke, Hampshire RG21 7PL (GB)

(30) Priority: 30.01.1997 GB 9701883

(71) Applicant: MOTOROLA, INC.
Schaumburg, IL 60196 (US)

(54) Apparatus and method for accessing secured data stored in a portable data carrier

(57) A portable data carrier includes a secure processing element and a co-located directory. A memory element is substantially separated by the secure processing element and disposed within the portable data carrier. A secure processor command stemming

from an operator input is then used to access a portion of the directory that includes an address key. The address key is then used to de-scramble an address in the memory element, which address location includes a representation of the data record.

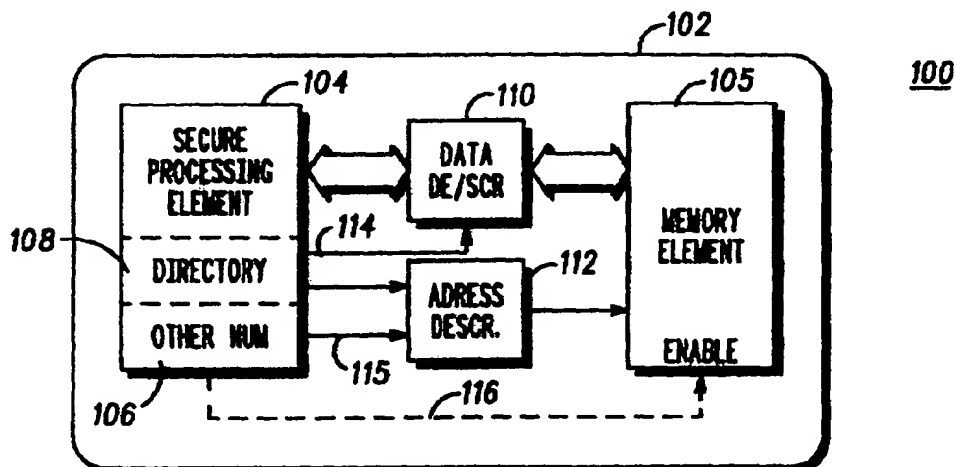


FIG. 1

EP 0 856 818 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 97 12 2744

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|---|--|--|--|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int.Cl.6) |
| X | US 4 960 982 A (TAKAHIRA KENICHI) 2 October 1990 (1990-10-02) | 1-4,6-10 | G07F7/10 |
| Y | * figures 2,3 * * column 4, line 46 - column 6, line 7 * * column 6, line 31 - line 64 * | 5,11 | |
| X | EP 0 617 383 A (MOTOROLA INC) 28 September 1994 (1994-09-28) * figure 1 * * abstract * * column 1, line 34 - column 2, line 10 * | 1,10 | |
| Y | DE 195 22 050 A (UESTRA HANNOVERSCHE VERKEHRSBE) 19 December 1996 (1996-12-19) * claim 1 * * column 1, line 67 - column 2, line 36 * * column 2, line 63 - line 68 * | 5 | |
| A | FR 2 667 714 A (GEMPLUS CARD INT) 10 April 1992 (1992-04-10) * abstract; claim 1 * | 5 | |
| Y | US 4 985 921 A (SCHWARTZ HERMANN) 15 January 1991 (1991-01-15) | 11 | |
| A | * claims 1-3 * * figure 2 * * column 3, line 22 - line 42 * | 2,6 | G07F G06K G06F |
| A | EP 0 458 306 A (TOKYO SHIBAURA ELECTRIC CO) 27 November 1991 (1991-11-27) * column 9, line 4 - column 10, line 27 * | 2,6,11 | |
| -/-- | | | |
| The present search report has been drawn up for all claims | | | |
| Place of search MUNICH | | Date of completion of the search 1 March 2002 | Examiner Hanon, D |
| CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document | | T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document | |

EPO FORM 1503 03.82 (P04001)

COPY



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 97 12 2744

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|---|---|--|--|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int.Cl.8) |
| A | <p>STRUIF B: "The use of chipcards for electronic signatures and encryption" COMPEURO '89., 'VLSI AND COMPUTER PERIPHERALS. VLSI AND MICROELECTRONIC APPLICATIONS IN INTELLIGENT PERIPHERALS AND THEIR INTERCONNECTION NETWORKS', PROCEEDINGS. HAMBURG, WEST GERMANY 8-12 MAY 1989, WASHINGTON, DC, USA, IEEE COMPUT. SOC. PR, US, 8 May 1989 (1989-05-08), pages 4-155-4-158, XP010016178 ISBN: 0-8186-1940-6 * page 4-157, column 1 *</p> | 11 | |
| | | | TECHNICAL FIELDS SEARCHED (Int.Cl.8) |
| | | | |
| The present search report has been drawn up for all claims | | | |
| Place of search: MUNICH | | Date of completion of the search 1 March 2002 | Examiner Hanon, D |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p> | | | |

EPO FORM 1503 (02.02.02) (P04001)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 97 12 2744

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

01-03-2002

| Patent document cited in search report | | Publication date | | Patent family member(s) | Publication date |
|---|---|---------------------|----|----------------------------|---------------------|
| US 4960982 | A | 02-10-1990 | JP | 63253493 A | 20-10-1988 |
| | | | DE | 3811378 A1 | 27-10-1988 |
| | | | FR | 2613856 A1 | 14-10-1988 |
| EP 0617383 | A | 28-09-1994 | GB | 2276254 A | 21-09-1994 |
| | | | CN | 1102265 A ,B | 03-05-1995 |
| | | | EP | 0617383 A2 | 28-09-1994 |
| | | | HK | 1003850 A1 | 06-11-1998 |
| | | | JP | 7006096 A | 10-01-1995 |
| | | | SG | 52302 A1 | 28-09-1998 |
| | | | US | 5563945 A | 08-10-1996 |
| DE 19522050 | A | 19-12-1996 | DE | 19522050 A1 | 19-12-1996 |
| FR 2667714 | A | 10-04-1992 | FR | 2667714 A1 | 10-04-1992 |
| | | | CA | 2093524 A1 | 10-04-1992 |
| | | | EP | 0553163 A1 | 04-08-1993 |
| | | | WO | 9206451 A1 | 16-04-1992 |
| | | | JP | 6502032 T | 03-03-1994 |
| US 4985921 | A | 15-01-1991 | AT | 123347 T | 15-06-1995 |
| | | | DE | 58909263 D1 | 06-07-1995 |
| | | | EP | 0337185 A2 | 18-10-1989 |
| | | | ES | 2072870 T3 | 01-08-1995 |
| EP 0458306 | A | 27-11-1991 | JP | 4033085 A | 04-02-1992 |
| | | | DE | 69127024 D1 | 04-09-1997 |
| | | | DE | 69127024 T2 | 26-02-1998 |
| | | | EP | 0458306 A2 | 27-11-1991 |